



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,193	01/29/2004	Kang Soo Seo	46500-000577/US	3702
36593 7590 03/17/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
DANG, HUNG Q				
ART UNIT		PAPER NUMBER		
2621				
MAIL DATE		DELIVERY MODE		
03/17/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/766,193

Applicant(s)

SEO ET AL.

Examiner

Hung Q. Dang

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-11,15,33-38,40-42,44-47,49-52 and 54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-11,15,33-38,40-42,44-47,49-52 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-848)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 01/07/2009 regarding 35 U.S.C. § 101 have been considered but they are not persuasive.

On page 15, Applicant argues that "the combination of Kato and Okada is improper" since "Kato is concerned with DVR technology whereas Okada is concerned with DVD technology." In response, the Examiner respectfully disagrees. Although Kato is concerned with DVR technology whereas Okada is concerned with DVD technology, there is no reason that makes incorporating the features of using "navigation area", "playlist", "clip information file", "playitem" and "sub-playitem" etc. disclosed in Kato into the DVD disclosed by Okada since DVD using these features for organizing the recorded data streams are well known in the art. There are also no difficulties in incorporating such features into one another since both formats as disclosed by Kato and Okada are concerned with digital recording of digital data streams formatted according to MPEG. Therefore, in contrast with Applicant's arguments, the Examiner respectfully submits that incorporating the teachings of Kato into Okada as described in the Office Action is proper and well motivated.

On pages 14-16, Applicant argues that the cited references do not disclose the feature of "audio data for reproduction with the still images asynchronously." In response, the Examiner respectfully disagrees. Kato clearly discloses such a feature at least in Fig. 25 and in paragraphs [0282] and [0283] where a sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data is

disclosed. The sub-playitem is disclosed to have an independent playback domain. It is sufficiently evident that the audio data associated with the sub-playitem is reproduced asynchronously with the image data associated with the playitem. Therefore, Okada and Kato does disclose the feature of "audio data for reproduction with the still images asynchronously."

On page 16, Applicant argues that Yoshimura does not disclose the feature of "a data area storing a first stream file including presentation data being reproduced as one of a browsable slideshow which presents the still images for infinite duration and a time-based slideshow which presents the still images for finite duration." In response, the Examiner respectfully disagrees. Yoshimura discloses playback or reproduction of still pictures on a cell-by-cell basis. At least at column 14, lines 52-57 and Fig. 9 of Yoshimura, if "STILL TIME PERIOD" is greater than zero and less than 255 (corresponding to the first duration information indicating displaying the still picture for a finite period of time), it will wait for specified time period, which is the second duration information, then goes to the next cell (step S12 to step S13 to step S15 of Fig. 9). This process keeps going until all cell reproduction is finished (step S16 of Fig. 9). This is obviously reproduction of data as a time-based slideshow. Otherwise, if "STILL TIME PERIOD" is equal to 255 (corresponding to the first duration information indicating displaying the still picture for a infinite period of time), it will wait until user enters his or her input as described at column 14, lines 59-63 and further illustrated at step S14 of Fig. 9, then goes to the next cell (step S12 to step S14 to step S15 of Fig. 9). The same

process is repeated until all cell reproduction is finished (step S16 of Fig. 9). This is obviously reproduction of data as a browsable slideshow.

Therefore, Yoshimura clearly discloses the features of "a data area storing a first stream file including presentation data being reproduced as one of a browsable slideshow which presents the still images for infinite duration and a time-based slideshow which presents the still images for finite duration."

For the reasons described above, the amended claims do not overcome the cited prior art.

Information Disclosure Statement

The information disclosure statement filed 06/23/2008 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Document JP 2001-86458 is not found and the its designated number cannot locate the document..

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, 8-11, 15, 33-34, 38, 40, 42, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436), Kanazawa et al. (US Patent 6,580,870), Kato et al. (US 2002/0145702), and Yoshimura et al. (US Patent 6,157,769).

Regarding claim 1, Okada et al. disclose a physical recording medium having a data structure for managing reproduction duration of still images, comprising: a data area (Fig. 8a) storing presentation data, the presentation data being divided into a number of still picture units (Fig. 9), each still picture unit including at least one still picture and associated related data, the related data not including audio data (Fig. 20e), decoding start time DTS#1 associated with the still picture V1).

However, Okada et al. do not disclose the data area storing a first stream including presentation data being reproduced as one of a browsable slideshow which presents the still images for infinite duration and a time-based slideshow which presents the still images for finite duration; multiplexing of the still images into transport streams, the data area further storing a second stream file including audio data for reproduction with the still images asynchronously; and a navigation area storing at least one playlist file and first and second clip information files separately within the navigation area, the playlist file including at least one playitem and at least one sub-playitem, the playitem indicating an in-point and out-point of the first stream file for reproducing the presentation data and providing first and second duration information for display of the still picture in the still picture unit, the sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data, and the first clip information file including at

least one entry point map, the entry point map including at least one entry point providing a link between a presentation time and a unit of the first stream file; wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time, and the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

Kanazawa et al., from the same field of endeavor, teaches multiplexing of video and audio data into a transport stream (column 1, lines 26-35).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate multiplexing the still images into transport streams as taught by Kanazawa into the still image management of Okada et al. in order to make the still images packaged for transporting over a communication medium.

However, the proposed combination of Okada et al. and Kanazawa et al. does not disclose the data area storing a first stream including presentation data being reproduced as one of a browsable slideshow which presents the still images for infinite duration and a time-based slideshow which presents the still images for finite duration, the data area further storing a second stream file including audio data for reproduction with the still images asynchronously; and a navigation area storing at least one playlist file and first and second clip information files separately within the navigation area, the playlist file including at least one playitem and at least one sub-playitem, the playitem indicating an in-point and out-point of the first stream file for reproducing the presentation data and providing first and second duration information for display of the still picture in

the still picture unit, the sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data, and the first clip information file including at least one entry point map, the entry point map including at least one entry point providing a link between a presentation time and a unit of the first stream file; wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time, and the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

Kato et al. disclose the data area storing a second stream file including audio data for reproduction with the still images asynchronously (Fig. 25; [0282]; [0283]; also see "Response to Arguments" above); and a navigation area storing at least one playlist file and first and second clip information files separately within the navigation area (Fig. 14; Fig. 45; [0219]), the playlist file including at least one playitem and at least one sub-playitem (Fig. 25), the playitem indicating an in-point and out-point of the first stream file for reproducing the presentation data and providing second duration information for display of the still picture in the still picture unit ([0267]; [0272]; Fig. 32), the sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data ([0282]; [0283]), and the first clip information file including at least one entry point map ([0194]; [0196]), the entry point map including at least one entry point providing a link between a presentation time and a unit of the first stream file ([0195]); wherein the second duration information indicates a length of time to display the still picture ([0267]; [0272]; Fig. 32).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the data area, the navigation area, the playlist, the playitem, sub-playitem, and the entry point map disclosed by Kato et al. into the still image management disclosed by Okada et al. and Kanazawa et al. in order to implement continuous reproduction of picture data (Kato et al., see Abstract).

However, the proposed combination of Okada et al., Kanazawa et al., and Kato et al. does not disclose the data area storing a first stream including presentation data being reproduced as one of a browsable slideshow which presents the still images for infinite duration and a time-based slideshow which presents the still images for finite duration and the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

Yoshimura et al. disclose the data area storing a first stream including presentation data being reproduced as one of a browsable slideshow which presents the still images for infinite duration and a time-based slideshow which presents the still images for finite duration (column 3, lines 1-18; column 14, lines 34-40, 53-63; Fig. 9; also see "Response to Arguments" above) and the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time (column 3, lines 1-18; column 14, lines 34-40, 53-63); and the second duration information indicates a length of time to display the still picture when the first duration

information indicates to display the still picture for a finite period of time (column 3, lines 1-18; column 14, lines 34-40, 53-63).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the first duration information disclosed by Yoshimura et al. into the computer-readable medium disclosed by Okada et al., Kanazawa et al., and Kato et al. in order to allow users have flexibility to control the duration of the display.

Regarding claim 2, Kanazawa et al. teaches a physical recording medium wherein the related data in at least one still picture unit includes graphics data and/or subtitle data (column 15, lines 11-17; column 24, lines 40-58).

Regarding claim 4, Kanazawa teaches a physical recording medium wherein the presentation data is multiplexed into the transport stream on a still picture unit by still picture unit basis (column 1, lines 26 – 35).

Regarding claim 8, Okada also teaches a physical recording medium wherein each elementary stream of the still picture and associated related data is aligned within the still picture unit (Fig. 4).

Regarding claim 9, Okada teaches a physical recording medium wherein each elementary stream is a packetized elementary stream (Fig. 4)

Regarding claim 10, Okada teaches a physical recording medium wherein each still picture still picture unit (fig. 4, SECTOR) includes one packet (PAYLOAD) from each packetized elementary stream (see col. 7, lines 9- 13).

Regarding claim 11, Okada et al. disclose a number of the packets of the packetized elementary stream of still picture data each include a presentation time

stamp such that, in combination with Yoshimura et al., when the first duration information indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet (Fig. 10a; column 18, lines 64-67).

Regarding claim 15, Okada teaches a physical recording medium wherein the still picture unit includes only one picture (see Fig. 7(b) Still picture #1).

Claim 33 is rejected for the same reason as discussed in claim 1 above.

Claim 34 is rejected for the same reason as discussed in claim 1 above.

Claim 38 is rejected for the same reasons as discussed in claims 10 and 11 above.

Claim 40 is rejected for the same reason as discussed in claim 15 above.

Claim 42 is rejected for the same reasons as discussed in claims 10 and 11 above.

Claim 44 is rejected for the same reason as discussed in claim 15 above.

Claims 6-7, 37, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436), Kanazawa et al. (US Patent 6,580,870), Kato et al. (US 2002/0145702), and Yoshimura et al. (US Patent 6,157,769) as applied to claims 1-2, 4, 8-11, 15, 33-34, 38, 40, 42, and 44 above, and further in view of Ando et al. (US Patent 6,353,702).

Regarding claim 6, see the teachings of Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. as discussed in claim 1 above. However, the proposed combination of Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. does not

disclose the entry point map includes an entry point associated with each still picture unit.

Ando et al. disclose entry point map includes an entry point associated with each still picture unit (Fig. 17; Fig. 18; column 15, lines 1-3; Fig. 10A; Fig. 10B; Fig. 10C; Fig. 12; column 17, lines 20-25).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the entry point map disclosed by Ando et al. into the still image management disclosed by Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. in order to implement quick access to each and every still picture. The incorporated feature would allow users to perform fast playback without missing any still picture, in which each and every still picture could be viewed by a jump operation, thus, enhancing the interface of the still image managing method.

Regarding claim 7, Ando et al. also disclose at least a number of the entry points each include a presentation time stamp associated with the still picture unit such that, when the duration information indicates to display a still picture for a finite duration, the finite duration is determinable at least in part from the presentation time stamp in the entry point associated with the still picture and the presentation time stamp in the next entry point (column 19, lines 37-44).

Claim 37 is rejected for the same reasons as discussed in claims 6 and 7 above.

Claim 41 is rejected for the same reasons as discussed in claims 6 and 7 above.

Claims 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436), Kanazawa et al. (US Patent 6,580,870),

Kato et al. (US 2002/0145702), Yoshimura et al. (US Patent 6,157,769), and Monaghan (US 2004/0141436).

Regarding claim 35, see the teachings of Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. as discussed in claim 1 above. However, the proposed combination of Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. does not disclose a driver configured to reproduce data record data on the recording medium; and a controller configured to control the optical recording device. Monaghan discloses a driver configured to reproduce data record data on the recording medium (Fig. 1, "write head 155"); and a controller configured to control the optical recording device (Fig. 1, "System Controller 140").

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a driver (read head) and a controller in order to be able to write data on an optical medium.

Claim 36 is rejected for the same reason as discussed in claim 35 above.

Claims 45-47, 49-52, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436), Kanazawa et al. (US Patent 6,580,870), Kato et al. (US 2002/0145702), Yoshimura et al. (US Patent 6,157,769), and Monaghan (US 2004/0141436) as applied to claims 1-2, 4, 8-11, 15, 33-34, 38, 40, 42, and 44 above, and further in view of Ando et al. (US Patent 6,353,702).

Claim 45 is rejected for the same reason as discussed in claim 6 above.

Claim 46 is rejected for the same reason as discussed in claim 7 above.

Claim 47 is rejected for the same reason as discussed in claims 10 and 11 above.

Claim 49 is rejected for the same reason as discussed in claim 15 above.

Claim 50 is rejected for the same reason as discussed in claim 6 above.

Claim 51 is rejected for the same reason as discussed in claim 7 above.

Claim 52 is rejected for the same reason as discussed in claims 10 and 11 above.

Claim 54 is rejected for the same reason as discussed in claim 15 above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621